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- **Weight Watchers: A total approach to weight control**
- **A Systems View of the International Federation for Home Economics**
- **The Positive Aspects of Technology for the Consumer**

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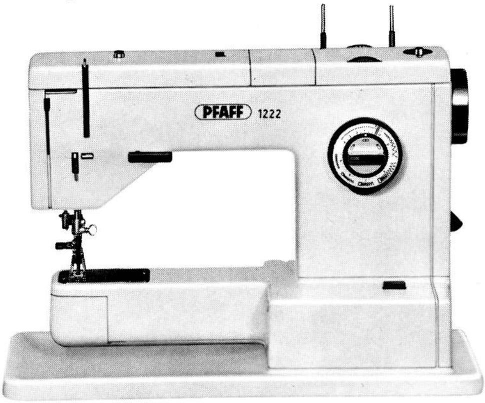

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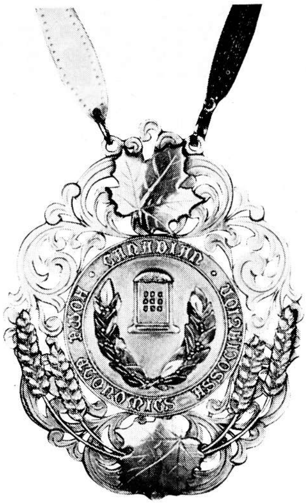
President's Message



CHAIN-OF-OFFICE

One of the most impressive symbols of the continuing efforts of the association of Canadian home economists to achieve our goals is the presidential chain-of-office (pictured here) which is passed along by the outgoing President to the incoming one at the annual meeting.

A beautiful piece of hand wrought silver jewelry, this office was presented to Canadian Home Economics Association by the United Kingdom Federation for Education in Home Management in 1959 in appreciation of hospitality extended to them during a tour of eastern Canada the previous year. The links of the chain from which the embossed medallion hangs, carry the names of all nineteen presidents of the Association since inauguration in Winnipeg, in 1939. It has been an honour for me to have been a link in the chain at this eventful time.

The highlight of the year will be the XIIIth International Congress in Ottawa which I feel sure will reinforce our aspirations as home economists to meet the everchanging challenges of education for living so that there is a meaningful quality in the lives of those we reach.

It is a goal worthy of the motif of the Canadian Home Economics Association, where the door represents the home, the maple leaf symbolizes Canada, with the laurel wreath signifying honour.

XIIIth
CONGRESS

Margaret Pope

E. Margaret Pope
President C.H.E.A.

Tentative Programme Outline 1976 CHEA CONFERENCE

"Life Today–Tomorrow"

Registration: Wednesday — 14:00 to 22:00, Thursday — 8:00 to 17:00, Friday — 8:00 to 10:00
At the Four Seasons Sheraton Hotel, Toronto

TUESDAY, JULY 13

CHEA Board of Directors Meeting

WEDNESDAY, JULY 14

CHEA Board of Directors Meeting

Afternoon Affiliated group meetings

17:00 Exhibits open

18:00 "Spanish Fiesta" reception
Dinner on your own

THURSDAY, JULY 15

8:30 OFFICIAL OPENING OF THE 1976 Conference

9:00 KEYNOTE ADDRESS: "Because People Count: Design for the Home and the Future"
Mr. Victor Papanek, F.S.I.A.,
Carleton University, Ottawa

10:30 OFFICIAL OPENING OF EXHIBITS
NUTRITION BREAK

11:00 "Community Living Today – Tomorrow"
Dr. J. T. Lemon, Director
Programme in Community Living,
University of Toronto

12:00 "TRY IT – YOU'LL LIKE IT!!"
Luncheon Speaker
Dr. A. D. Odell, Vice President,
Industrial Grain Products
Montreal

Afternoon ANNUAL MEETING
Exhibits open

Evening Exhibitors Gala on board the "Jadran"

FRIDAY, JULY 16

Morning Rah! Rah! Breakfast
Tables will be reserved for alumnae groups

9:00 Concurrent Speakers:
"The New Consumer Climate and the Home Economist"
Mr. Sender Hoffman, Vice-President
Yankelovich, Skelly, White, Inc.
New York
or
"Sensible Living Today – Good Health Tomorrow"
Dr. Peter D. Wood, Deputy Director
Stanford Heart Disease Prevention Programme
California

10:15 NUTRITION BREAK

10:45 GENERAL SESSION
"The Revolutions of the Future"
Dr. John Kettle, Free-Lance Writer and Consultant.
Recent 1976 Book: "Hindsight on the Future"

12:30 LUNCHEON: to be announced, possibly sponsored
Information will be given on Metric Overview
Wendy Sanford of Corning Glass Works of Canada and "The Hope of Habitat"

FRIDAY, JULY 16

Afternoon CONCURRENT SESSIONS

14:00 **A Session** – Choice of One:

Family Studies – "Preparing Home Economists to be competent family professionals today and for tomorrow"
Dr. Roy H. Rodgers, Director
School of Home Economics, University of B.C.

Housing and Design – "Futuristic Designs"
Ray Staples, President, Interior Design Association of Ontario

Foods and Nutrition – "Nutrition Behaviour Today – Tomorrow"
Mrs. Heather Milne Nielsen
Formerly Prof. at School of Hygiene,
University of Toronto

Textiles and Clothing – "Life Today – Tomorrow" related to economic and socio-cultural aspects of clothing and textiles
Dr. Anne Kernalaguen,
Division Chairman Clothing & Textiles,
University of Alberta, Edmonton

Consumerism
"Consumerism and the Law"
Marvin Zuker, Lawyer, Educator and co-author of "The Law is not for Women".

Metric
"Metric Up-Date – What's New?"
A well-informed panel on all phases of metric conversion.

15:15 NUTRITION BREAK

15:45 **B Session** – Choice of One:

Family Studies – "Violence and Mass Media Content – What is there; what it all means"
His Honour Judge L. A. Beaulieu,
Family Court Judge and Member of
Royal Commission on Violence in the Communications Industry.

Housing and Design – "Where Have all the Old Folks Gone"
Sister St. Michael Guinan, Director Canadian Institute for Religion and Gerontology.

Foods and Nutrition – Panel discussion covering new food products, research implications, life-styles and nutrition, resource restraints.

Textile and Clothing – Three panelists covering "Future of Fibres", "Home Sewing Trends for Near and Far Future" and "Clothing: The Silent Language".

Consumerism – "Consumer Relations: An Emerging Corporate Function"
Dr. Trevor A. Watts, University of Guelph,
Dept. of Consumer Studies.

Metric – "Selling the Metric Message"
Panel Discussion

Evening CHEA Reception and ANNUAL BANQUET

SATURDAY, JULY 17

TRIPS AND TOURS (see enclosed page)

Weight Watchers: A total approach to weight control

by **Barbara Abrams M.S., R.D.,**
Weight Watchers International, Inc.

INTRODUCTION

In many societies throughout history, being overweight was considered a sign of beauty, wealth, success and prestige. Excess weight was thought to be a protection against disease as well as a sexual allure. Even today, in some areas of the world, an obese person is regarded as attractive.

However today, we live in an overweight conscious society, where slender fashion models are used as standards of ideal weight. We find a new weight reducing scheme in virtually every magazine we pick up. Scientists and doctors are constantly reminding us of the health hazards associated with obesity.

DEFINITIONS

Although the terms "overweight" and obesity" are quite distinct, they are often used interchangeably. Overweight merely means that someone weighs more than some arbitrary standard which is usually based on life insurance statistics. Obesity is an excessive accumulation of body fat, and not necessarily related to total body weight. Overweight does not always indicate excess fat. For example, football players are usually overweight, but generally not obese. Although there is no precise definition of obesity, it has been suggested that a person above ten percent of his desirable body weight (based on height and body build) be considered overweight, whereas an individual exceeding twenty percent of his desirable body weight be classified as obese[1].

CAUSES OF OBESITY

Superficially, the basic cause of obesity seems very simple. The only way to become obese is to have energy intake (calories) exceed energy output over a period of time. Everything in our modern world today pushes the balance in this direction. We live in an automated world of spectator sports and physical inactivity. We are tantalized by the food industry and advertising agencies which are constantly tempting us with more and more calorie rich foods. Hospitality in our culture is automatically linked with eating and drinking; love and affection are often expressed through oral gratification. In these times of anxiety and emotional stress many people use food as an outlet for relieving tension. Conversely, boredom or too much leisure time may also lead to overeating.

Although we know that obesity is the result of eating more calories than are needed, the real underlying causes of excessive appetite are not known and appear to be very complex[2]. In obesity we have a condition which may involve hereditary, psychological and environmental factors.

Hereditary Influences: There is evidence in animal studies that genetic factors influence body weight and cause obesity. Demonstration of this in man is difficult because it is almost impossible to separate environmental factors from genetic effect. However a high degree of correlation exists between overweight in parents and their children. In one study, only nine percent of the children of normal weight parents were obese. When one parent was obese, forty percent of the children were obese too. When both parents were obese the proportion of obese children was eighty percent. This pattern is not seen among adopted children and their parents[3].

Similar findings have been reported indicating that the weight of adopted children bears little relation to the weight of their foster parents even if the children are adopted practically at birth. Studies of twins also demonstrate the importance of hereditary factors. There is a much higher correlation between the weights of identical twins than between fraternal twins or siblings. The weights of identical twins brought up in different environments also had a remarkably good correlation although it was not as close as if they had been brought up together. This difference in weight between identical twins brought up in different environments has been found to be due to environmental factors influencing appetite and habits of eating.

Psychological Influences: The importance of psychological factors in obesity is being more and more widely recognized. It is generally accepted that food plays a part in the lives of individuals beyond its physiological function. Some people resort to overeating to alleviate tension, anxiety, worry, frustration or boredom.

Hamburger[4] lists four categories of overeating that lead to emotional obesity: (1) overeating as a response to nonspecific emotional tensions; (2) overeating as a substitute gratification in intolerable life situations; (3) overeating as a symptom of underlying emotional illness, especially depression or hysteria and (4) overeating as an addiction to food.

An example of the relation of emotional stress to overeating and obesity is the "night eating syndrome". This syndrome is characterized by morning anorexia, sleeplessness and consumption of large amounts of food in the evening and night hours. This syndrome usually manifests itself during stress periods[5].

Environmental Influences: Such factors as culture, socio-economic class, activity and diet all effect the development of obesity. Social factors are major determinants of obesity in our modern urban society. A study by Stunkard[6] has shown an inverse relationship between the prevalence of obesity and socio-economic status. In one study the prevalence of obesity was seven times higher among women reared in the lowest socio-economic category than those in the highest. The same tendency existed among men but to a much lesser extent. About thirty percent of the women in the lowest socio-economic category were obese compared to only four percent of the women in the highest status category[7]. Ethnic background, social mobility, number of generations in the U.S. and religious affiliation[6] all were related to the prevalence of obesity.

RISK FACTORS

Newspaper and magazine articles, radio and television programs continually stress the theme that overweight carries the penalty of increased sickness, disability and earlier death.

Obesity is associated with increased prevalence of a number of diseases, among them gall bladder disease, gout, diabetis mellitus, hypertension and possibly coronary atherosclerosis[9]. Obesity may be considered to predispose the individual to pulmonary emphysema and chronic bronchitis, since it often results in interference with pulmonary ventilation. It increases surgical risk[9] and, as insurance mortality statistics have indicated, it reduces life expectancy, especially in the younger age group[9]. However, whether the increased mortality is due directly to obesity or to the associated disease has not been determined. Clinical evidence definitely indicates that reduction of excess weight is of prime importance in the treatment of osteoarthritis diabetis mellitus and cardiovascular disease[9].

Mann[10] has suggested five general mechanisms by which obesity adversely affects morbidity and mortality and might be detrimental to health. First, the additional weight of the stored fat, might, through its mechanical burden on the frame and circulation, overwork some systems and lead to bad health. Second, the increased food intake of obese persons might damage health by increasing the intake of some unspecified noxious agents in food. Third, the excessive intake of food energy necessarily promotes glyceride synthesis and transport, which may contribute to atherosclerosis. Fourth, physical inactivity, regarded by some as the most convincing indictment for the cause of obesity, has been considered the prime cause of several chronic diseases. Fifth, there is a possibility that a genetic linkage exists between a tendency to obesity and metabolic disease.

Possibly of lesser public health significance but still of great importance to the individual are the cosmetic, physical and psychological effects of overweight and obesity. Obesity during childhood may very seriously affect the child's development of emotional maturity as well as his attainment of physical fitness at maturity[11]. In a ten year study of scholastic performance and physical growth, academic achievement was notably lower in boys classified as obese[12]. Thus it would appear that the costs of obesity to the child and to the adult are great.

TREATMENT

Weight control is a lifetime problem. There is no easy way, no magic formula to lose weight. Crash and fad diets are appealing because they seem to offer a painless and rapid way to lose weight. On these diets many people enjoy a temporary weight loss, but soon return to their usual eating habits and the lost weight is quickly regained.

Evidence, gathered from studies using diets with varying combinations of food groups, shows that weight loss occurs when calories are adequately decreased, regardless of the food sources of these calories.

However, fad diets can be dangerous to health. Recent research has demonstrated that when diets emphasize only certain foods and are therefore nutritionally unbalanced, weight can be lost from body tissues such as muscles and organs which is undesirable. Even the brain and other organs can be deprived of important sources of energy by the wrong diet. The brain, for instance, depends almost solely on the blood's sugar for its energy needs. Inadequate quantities of carbohydrate and of the essential amino acids found in high quality protein of meat, fish and eggs may result in fatigue and depression. This contributes to the dieter's despairing return to his former eating habits.

A logical approach to weight reduction must provide all the essential nutrients and at the same time limit calories. It must protect the individual from between-meal hunger and give a sense of well being without causing fatigue. Such an eating regime should be easy to maintain at home or away from home. Most of all, an acceptable eating program must be able to be followed over a period of time and re-educate eating habits so that with suitable caloric additions it becomes an established pattern for lifetime eating.

"The WEIGHT WATCHERS" eating program is unique and differs from other reducing methods in several important ways. It is part of a total program and not a diet. It is based on creating good eating habits, using the foods available in the market, according to sound nutritional principles. The widest possible food choices are allowed within each food category in order to provide the variety necessary to insure adequate intake of all nutrients as well as to make the food program as palatable and acceptable as possible. Control of the quantity and frequency of food allowed adjusts the program to a moderate restriction in total calories. Thus, by weighing and measuring his food, the member is made constantly aware of portion sizes and portion control.

Nutritional adequacy is based on the U.S. Recommended Dietary Allowances of the Food and Nutrition Board of the U.S. National Research Council. In addition, the recommendations of the American Heart Association and the American Diabetes Association have been taken into consideration so that the calorie distribution approximates twenty percent from protein, thirty-five percent from fat and forty-five percent from carbohydrate.

A comparison of the nutritive value of the WEIGHT WATCHERS Program with the U.S. Recommended Daily Dietary Allowances of the National Research Council is given in Table 1.

The success or failure of a food program depends on converting these nutritional requirements into an acceptable meal plan. The WEIGHT WATCHERS Program is composed of basic foods such as fruit, vegetables, meat, poultry, legumes, fats, eggs, cheese, bread and skim milk. The complete food program and an explanation of how to use it is given to each member when they join the group. This gives exact details of foods that are allowed, quantities to be used, meal plans and foods that cannot be used. A sample days menu can be seen in Table 2.

The Ladies, Men and Youth Programs differ to meet varying nutritive needs but follow the same basic format adjusting for the amounts of food.

Once the member comes within ten pounds of his goal weight, he is switched to the Leveling Plan. Through our extensive experience we have found that the last ten pounds are the most difficult to lose. A temporary greater caloric restriction helps our members reach their goal weight.

Finally, upon reaching goal weight, the member begins the Maintenance Plan. This is a highly individualized plan where members are taught to select foods which have been previously restricted and to add them in measured amounts to their daily menu plan. If the member shows a weight gain, then he is instructed to cut back on his additions until he reaches a point where his weight levels off. Thus, it is possible to introduce high calorie foods such as chocolate syrup, hearty soups, bacon and eggs, pies, pizza and alcoholic beverages in limited quantities so that the formerly obese individual can enjoy previously restricted foods without regaining lost weight.

A diet too restricted and too unpalatable tends to interfere with motivation and adherence to the food program which results in failure to achieve and maintain the desired weight loss.

The desire to eat always remains with the obese. It is only through constant discipline and strengthening of motivation that normal weight can be maintained indefinitely. The most important and unique part of the WEIGHT WATCHERS Program is the handling of the psychological problems which are always present in the obese individual and which really determine whether any program for the management of obesity will succeed or fail.

A series of WEIGHT WATCHERS Personal Action Plans (modules) has recently been incorporated into the classroom. These modules are behavior-oriented, day by day steps designed to help each member achieve an ever-increasing level of eating management skill. The modules also instruct the member in how to handle critical situations and other obstacles in weight reduction. In this way members can learn to better control their eating habits and to manage their living situations in ways that make success in losing weight more likely. It is the lack of this component that makes it so difficult for the physician or dietitian to provide the necessary psychological assistance when the obese individual has an almost uncontrollable desire for food.

Thus, education, discipline and behaviour modification are important adjuncts to group interaction in maintaining and strengthening motivation. A system of reward is also important. Members are interested in reducing because of the anticipation of rewards of some kind. These may be better health, better acceptance by society, a better job, better appearance and many others. Attractive "goal" pins are awarded in front of the class for those reaching their goals. In addition, certificates are awarded to those who lose 100 pounds or more. Through discussion with lecturers and other class members who have achieved their goal weight, members are helped to be prepared mentally for a new image and a new position in society which comes with the physical transition to normality.

In the WEIGHT WATCHERS Program, motivation is strengthened by a number of carefully planned procedures. First is the payment of a fee so that the individual wants something for his money. The individual becomes a member of a group under the supervision of a lecturer who has been obese and has succeeded in controlling obesity by following the WEIGHT

TABLE 1
Weight Watchers Program and U.S. Recommended Dietary Allowances of the U.S. National Research Council

	energy (kj)	*protein (g)*	*fat (g)*	*choles-terol (mg)*	*carbo-hydrate (g)*	*calcium (mg)*	*phos-phorus (mg)*	*iron (mg)*	*mag-nesium (mg)*	*sodium (mg)*
Ladies										
per day	1,295	102	53	441	134	1,021	1,514	14	227	1,352
RDA	2,000	55				800	800	18	350	
per cent of RDA	64	185				127	189	79	64	
per cent of total calories		29	34		38					
Men										
per day	1,608	117	67	457	164	1,076	1,699	18	240	1,516
RDA	2,800	60				800	800	10	400	
per cent of RDA	57	195				134	212	178	60	
per cent of total calories		27	35		38					
Youth										
per day	1,658	120	68	357	172	1,594	2,005	19	302	1,678
RDA	3,000	60				800	800	18	400	
per cent of RDA	52	201				199	250	103	75	
per cent of total calories		27	34		39					

	vitamin A value (IU)	*vitamin E (IU)*	*ascorbic acid (mg)*	*folacin (mg)*	*niacin (mg)*	*riboflavin (mg)*	*thiamine (mg)*	*vitamin B12 (mcg)*
Ladies								
per day	11,023	16	176	0.2	22.4	2.3	1.2	25.8
RDA	5,000	25	55	0.4	13	1.5	1.0	5
per cent RDA	220	60	320	45	172	153	120	516
Men								
per day	12,805	17	251	0.2	26.2	2.6	1.5	25.9
RDA	5,000	30	60	0.4	18	1.6	1.4	5
per cent of RDA	256	56	419	48	146	162	107	518
Youth								
per day	13,260	16	238	0.2	25.1	3.3	1.6	35.8
RDA	5,000	25	55	0.4	20	1.5	1.5	5
per cent of RDA	265	64	432	52	125	220	106	716

TABLE 2
SAMPLE MENU PLAN

MORNING MEAL:

Fruit or fruit juice
Hard or soft cheese or egg or cereal (with skim milk)
Enriched white bread or whole wheat bread with liquid vegetable oil margarine
Coffee or tea without cream or sugar

MIDDAY MEAL:

Fish, meat, poultry, legumes or cheese or eggs
Vegetables such as tomato, celery, broccoli or spinach
One glass of skim milk
Enriched white bread or whole wheat bread with liquid vegetable oil margarine
A fruit such as an apple, pear, orange, peach, nectarine
Coffee or tea without cream or sugar

EVENING MEAL:

Serving of meat, fish, poultry or legumes
Two vegetables such as carrots, peas, cucumbers, tomatoes, onions, string beans, asparagus etc.
Fruit such as berries, cantaloupe, pineapple
Coffee or tea without cream or sugar

BETWEEN MEALS OR WITH MEALS:

Bouillon, tomato juice, mixed vegetable juice, two glasses of skim milk and 3 fruit if not taken with meals

WATCHERS Program. No one is allowed in the room unless he is on the program. The class begins with the private weighing of each member, by a trained weigher using a beam balance, so that the members' change in weight is accurately recorded each time he attends class.

The lecturer then leads the members into a discussion of their problems, encouraging open discussion and interchange of views. Successes are applauded and rewarded; those who are failing are encouraged and advised as to how to improve their performance.

A second important part of the lecturer's responsibility is education. In addition to handing the member the printed food program and scales for weighing food, the lecturer individually goes over the interpretation of the food program and answers individual questions concerning specific food items. The educational efforts of the lecturer are directed toward foods that can be eaten and the quantities allowed. The lecturer is purposely not trained in nutrition so that he teaches in lay language and does not attempt to use technical information. Such words as calories, protein or cholesterol are not used in the class. Any member who wants to have technical explanations is referred to a professional source. What our members are seeking from us is precise information about food selection. The most important objective for them is a plan for the proper choices of food that will enable them to lose weight and maintain their health.

CONCLUSION

Many members have maintained their goal weight for ten years or more. Obviously, weight control requires constant vigilance and sustained motivation. We believe the WEIGHT WATCHERS eating pattern is so individualized, so readily acceptable and easily met by foods available at home, in restaurants or at parties, that there is no feeling of punishment or deprivation. Thus, considerable satisfaction can still be derived from food without regaining undesirable weight while following a healthful, well balanced program.

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Come join us for coffee at the conference.

Joyce Wainman will have a nice cup of coffee (Melitta of course) waiting for you at our booth at the conference. Stop by for a look at our slide presentation on coffee history, brewing methods, and the differences in beans around the world. If you would like to show this presentation for educational purposes, simply contact Joyce at our head office.

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SYSTEMS VIEW OF THE INTERNATIONAL FEDERATION FOR HOME ECONOMICS

by **Wanda Young,**
Vice President,
I.F.H.E.,
on educational leave,
University of Saskatchewan

The systems philosopher, Ervin Laszlo (1972) describes a system as an organism in an environment with an input-output exchange of information and energy. If the International Federation For Home Economics, hereinafter called I.F.H.E. is the organism, what is the environment? If the I.F.H.E. is the organism, what are the inputs and outputs of energy and information?

The Environment Of The International Federation For Home Economics

At present the international headquarters office is situated in Boulogne. The near environment includes sunshine of France; water from the nearby Seine River; land close to the Bois de Boulogne, but even closer to the freeway that surrounds Paris; and air of Paris. This working environment is provided by the French Ministry of National Education. The office consists of two rooms, two storage rooms, a kitchen and bathroom. This space accommodates a bookkeeper, a translator (both part-time) and a secretary in one room and an office manager and the secretary general in the other room. During times of pressure this staff is supplemented by volunteer workers from the French National Committee for Home Economics. The increase in membership and in activity in the past decade, with United Nations organizations such as UNESCO, FAO, UNICEF, UNFPA makes it necessary now to search for new office space. Will and should the cost of office environment for I.F.H.E. continue to be subsidized by the French government? The transactions of the I.F.H.E., such as payment of office staff, production of printed matter, investment of monies are affected by the legislation of France.

The *History Of The International Federation For Home Economics* (1972) shows that the environment for the headquarters has always been Europe. In 1908, persons interested in Home Economics were invited to a conference in Switzerland instigated by Mr. Georges Python. A decision made at this conference resulted in founding an International Office with headquarters in Fribourg, Switzerland.

For almost seventy years, home economists of the world have owed much to the home economists and governments of France and Switzerland for the energy and information inputs they have made to I.F.H.E. At present the nineteen member Executive Committee includes two Swiss, two

French, who are supported by six delegates from other European countries making just over half of the Executive Committee from Europe.

However, the aim of I.F.H.E. is development of education in Home Economics in *all* countries. At present there are 187 members representing over 50 countries. Members are groups of over 20 persons, such as the national, provincial and local associations in Canada. To indicate the diversity, the Executive Committee on January 3, 1976, approved four new members, as follows: the Goteburg Teachers Training College (Sweden); the National Association of School Meals Organizers (United Kingdom); the Zemun Higher Pedagogical School of Home Economics (Yugoslavia); and the Home Economics Department of the Ministry of Education (Senegal). In addition to the members (groups) who send official delegates to Council meetings of I.F.H.E., individual home economists may become associate members. There are 2187 associate members, from over 70 countries of the world.

To summarize: the near environment of I.F.H.E. has always been in Europe, from 1908 in Fribourg, Switzerland and since 1955 in Boulogne, France, but the Executive Committee, the members of Council and associate members bring global representation.

Inputs And Outputs Of Energy And Information

Much of the energy of the secretariat and Executive Committee is devoted to improvement of communication with members and individuals, through the Bulletin and congresses.

In 1975, the Bulletin appeared in a new format. Articles are now selected not only to inform home economists about professional work in other countries, but also to further relations with ministries of education and international organizations and corporations utilizing the services of home economists and sharing a value for a family centered life. International publications must meet the publishing and postal regulations of the country in which they are produced. Postal costs are increasing and may affect development of the Bulletin. Articles for the Bulletin are translated into English, French and German, the official languages of I.F.H.E. Some of the translation is done professionally, some is volunteered by members. Mme. O. Goncet, the secretary general of I.F.H.E. is a journalist, dedicated to improving this professional publication.

Twelve congresses have been held, at five year intervals until 1968 and since then at four year intervals. With the exception of 1958, when the University of Maryland was the site and the United States hostessed the congress, all meetings have been held in Europe. In 1976, Canadian home economists will provide the energy to arrange the thirteenth congress on the theme "Life, Not Just Survival". The purpose of the congress is to facilitate the exchange of ideas. Since 1908, a preliminary report on the state of some aspect of the profession has been prepared in advance. In 1976, the preliminary report is concerned with resources that contribute to human survival, if thoughtfully used.

International agencies work with I.F.H.E. As a non-governmental agency, I.F.H.E. has status B with UNESCO for work on *World Survey Of Home And Family Education Within Formal Education* which commenced with a pilot survey in 1969. The report was finalized in 1972 and revised in 1974. A Canadian, Dr. Helen Abell, was one of the consultants engaged for this project.

FAO and UNFPA have worked with I.F.H.E. and the A.I.D. section of the American Home Economics Association on a project to develop awareness about population problems. A.I.D. funds provide a part-time consultant, Mrs. Betty Williams, in Paris, for this work.

In 1975, seven international conferences were attended by representatives of I.F.H.E. In addition, Mme. Goncet has attended the Non-Governmental Agency of the United Nations, in Paris and is elected treasurer of N.G.A. Satenig St. Marie attends UNICEF meetings in New York. The president of I.F.H.E., Isabel Horne of Australia, has attended annual meetings of the American Home Economics Association, the Canadian Home Economics Association and the Fiji Home Economics Association, in 1975.

The opportunity to make inputs of energy and information and receive outputs by sharing ideas with home economists from many countries; to debate how "to contribute to mutual enriching of the family group and its members" – an objective of I.F.H.E. will be easy for home economists in North America in 1976 when from July 19 to 23 the Congress of I.F.H.E. will be held in Ottawa, Canada.

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HOME ECONOMICS REGISTRATIONS IN CANADIAN UNIVERSITIES 1975 – 1976

University	Title of Home Economics Department	Bachelor's Degree	Number of Students Enrolled in Home Economics Programs – full time						Total No. of Full time Home Economics Students (undergrads)	No. of Students Receiving Bachelor's Degree in 1976 Academic Year.	Part time Students	Other Information
			1st yr.	2nd yr.	3rd yr.	4th yr.	Mas-ter	Doc-tor				
British Columbia	School of Home Economics	B.H.E.	71	130	100	105	13	2	421		123	44 Students in H.Ec. Education Program
Alberta	School of Household Economics	B.H.Ec.	78	100	80	91	44	–	349	80		28 students in B.Ed. with Household Ec. Specialty. Offer part-time and refresher as well as spring and summer.
Saskatchewan	College of Home Economics	B.S.H.Ec.	53	52	39	58			202	58		Part-time offered. 2-day update offered May/76.
Manitoba	Faculty of Home Economics	B.H.Ec.	115	100	106	126	36	–	483	124	28	24 Faculty of Education certification year following B.H.Ec. 14 part-time Master's
Guelph	College of Family and Consumer Studies	B.A.Sc.	277	265	241	233	34	3	1016	280		* (see footnote) Some non-credit conferences and workshops.
Ottawa	Dept. of Dietetics	B.Sc.(Diet)	25	42	45	30	n/a	n/a	141	62	29	
		B.Sc.(H.Ec.)	0	5	1	12			18			
		B.A.conc.H.E.	0	8	11	n/a			19			
Toronto	Home Economics Education	B.Ed.							59			Summer school 1975=30 students. Food Science program being discontinued. New program Studies in Community Living.
	Faculty of Food Sciences	B.Sc.	0	64	77	72	–	–	213	72		
Ryerson Polytechnical Institute	Dept. of Home Economics	B.A.A. in Home Ec.	130	101	105	79	n/a	n/a	415	85		Offer part-time and refresher.
Brescia College Western Ontario	Dept. of Home Economics	B.Sc.(H.Ec.)	96	68	48	22	–	–	234	50	17	Have two courses (a full course and a half course) for non H.Ec. Majors.
Windsor	Faculty of Social Science	B.A.	44	39	30	6	–	–	119	40	11 (day)	164 Extension, 3 Special.
Macdonald College McGill University	School of Food Science	B.Sc. (Food Science)	52	47	15		10	4	114	18		Offer part-time and refresher. 3 in Faculty of Education.
Université de Montréal	Départment de Nutrition	B.Sc.) (Nutrition)		47	49	48	24	–	144	48	11	Offer refresher courses.
Laval	Diétetique	B.Sc.S. (diététique)	48	47	41		6 f. t.		136	64		Part-time B.Ed. (Economie familiale) offered.
		B.Sc.A. (Consummation)	13	6	23		4 p. t.		42			
Moncton	Ecole des Sciences Domestiques	B.Sc.D.	28	29	21	33	10		111	28		Offer part-time. 3 Masters graduating 1976
Acadia	School of Home Economics	B.Sc. (H.Ec.)	43	13	37	43	–	–	136	43		
Mount Saint Vincent	Dept. of Home Economics	B.Sc.(H.Ec.) B.H.Ec.)	18	78	58	64	15 M.A. in H. Ec.Ed.		218	67		Offer part-time
Mount Saint Bernard, St. Francis Xavier	Dept of Home Economics	B.Sc.	20	18	18	20			76	20		Offer both refresher and part-time programs
Prince Edward Island	Dept. of Home Economics	B.Sc. with H.Ec. Major	20	22	15	23			80	22		Some part-time students. Offer summer school courses

The students in the undergraduate and graduate programs at the University of Guelph are enrolled in five major areas of study: Family Studies, Consumer Studies, Applied Human Nutrition, Child Studies and Textiles. Not all of these students will identify after graduation with Home Economics and the Canadian Home Economics Association. Some will choose to identify with organizations and fields of interest more specifically related to their major area of study and their career choice.

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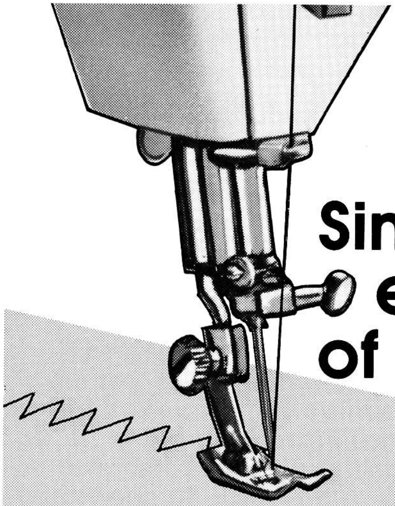

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The Positive Aspects of Technology for the Consumer

by **F. M. Clydesdale, Ph.D.,**
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Presented at
The 1976 Kellogg Nutrition Symposium,
Toronto, Canada

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For many reasons, including anti-establishment feelings, work of consumer activists, mistrust in the food industry, mistrust in government regulatory agencies and a general misunderstanding of what chemicals are, there is a fear of chemicals or "chemophobia" developing in our nation. This has led to the belief that any processed food is bad, that any food manipulated by man is bad, and that the addition of any chemical to a food material is wrong. This concept is ludicrous at best because it must be recognized that foods themselves are simply chemicals, humans are simply chemicals, and that the only really scientific reason for eating is to replace the chemicals in the human body with chemicals from food. One can only conclude, therefore, that the addition of chemicals to food material, as long as such chemicals are safe is at times a necessary and indeed fortuitive thing to do. At times, unfortunately, scientists proclaim that certain foods are bad for health and, therefore, the consumer should not eat them on the basis of very poor evidence. Generally, this involves a minority of the scientific community. Some consumer activists, certainly not all, claim that anything the food industry does is somehow at fault for world starvation. A concept which escapes logical analysis.

Indeed the Food Industry has the potential to produce the safest, highest quality, most nutritious foods the world has ever known. Without our technological advances the world would be in a condition approaching mass starvation.

Processing is a rather simple notion, but one whose function is often misunderstood and misrepresented. For instance when a food material is cut, cooked, cooled, refrigerated or handled in the kitchen, it is being processed.

In a recent book by Luh and Woodruff (1975) it is stated that "Banishment of hunger and malnutrition from the world depends in large measure on how rapidly agricultural productivity can be increased in the developing countries. Development of processing, storage, transportation, and marketing programs is equally important to make efficient use of farm products."

Further "Food processing has many goals. Perishable foods are preserved in a stable form that can be stored and shipped to distant markets all year round. The basic preserving processes are canning, freezing, dehydration, salting, pickling, and freeze-drying. Processing can change foods into new or more usable forms and make foods more convenient to prepare." It should be noted that the common forms of processing quoted are simply refinements of what has been going on in the kitchen for thousands of years.

Processing then is simply a method to maintain food in an acceptable, safe, and nutritious form for an extended period of time. Therefore when we speak of Technology's role in meeting nutritional needs we are speaking of much more than just nutrition or fortification.

The single concept which is most often ignored, or not even thought of, is the fact that the most nutritious foods possibly are worthless to the consumer if they are not maintained in a safe and acceptable form. Nutrition, per se, is not the most important factor to the consumer and cannot even be considered as a single entity. Nutrition must be considered within the framework of many other factors such as: Cost, Acceptability, Safety, Availability, Convenience and Quality.

In fact, I believe that although at this time, nutrition as a generalized concept, is extraordinarily important to the consumer, it maintained this preeminent position only up to the point of purchase. At purchase, the other factors mentioned previously loom into the overall picture and predominate in the minds of the consumer. At this time of economic turmoil, who would argue the importance of cost. At this time of mistrust, who would argue the importance of safety. The hedonistic values in our society imply a demand for good flavor, acceptability and quality. At this time of struggling for individual rights and the role of women in our society, who would argue the importance of convenience which liberates the cook from the kitchen.

To further emphasize the role of technology and the importance of "other factors" as well as nutrition, consider the following quotation from a recent book by Whelan and Stare (1975), "We tend to take many of the positive elements of our advanced state of technology for granted – and even make them the subject of criticism. We routinely expect that we can come home at night after a day's work, walk into a well-stocked pantry, pick and choose exactly what we will have for dinner from the refrigerator, and have it ready in less than an hour. We naturally assume that the courses we prepare and eat will be nutritious, attractive, nd enticing to our taste buds. We expect that our meals will be enjoyable occasions, not just routine periods for satisfying biological needs". You know it wasn't always that way. Technology has played a dramatic role in meeting consumer demands and needs.

It is essential that consumers, educators, and the media be aware of this view of nutrition within the total framework of food and feeding if technology is to be understood and utilized. It must be remembered that no matter how nutritious a food is, it will not be eaten unless it satisfies the other parameters discussed. Nutrition is useless unless the material which contains the nutrients is available, is purchased, is safe, and is eaten.

Acceptability, Availability, Quality

There are many reasons why people choose to eat a particular food or foods. These range all the way from religious acceptance, to ethnic patterns, to sociological behavior. Indeed we do not know all the reasons why certain foods are chosen but we do know some of these which are not nutritionally based. Benarde (1975) reports a study conducted in World War II. When Britain was beseiged early in the war, the problem of feeding a nation that relied so heavily on imports became a matter of acute anxiety. A study was undertaken to determine the nutritional requirements of an adequate diet. Tests on both men and women soon showed that a simple but tedious diet of green vegetables, bread, and milk could easily support vigorous activity. Although such a diet would have drastically reduced the need for imported food, it was not adopted because it was considered far too monotonous for the maintenance of a highly advanced country for any sustained period. A British scientist, Magnus Pike, commented: "A diet may be perfectly balanced nutritionally, but if it is not sufficiently attractive a workman may not eat enough of it to do his work. If a chemist can enhance the attractiveness of such a diet harmlessly, he is, in fact, contributing to nutritional well-being". Thus by increasing acceptability through technology the nutritional standards of a country or people can be raised simply because the food will be consumed.

There is no need to belabour the problems of world hunger in this discussion. We have been bombarded in the past several years by the communications media on this very real and serious problem. Population is growing, energy availability is decreasing and food supplies per person are dwindling. This problem is truly a triumvirate of Food-Population-Energy and it is impossible to approach a solution unless all three are treated simultaneously. However, considering just the food problem it becomes apparent that the world cannot survive without technology. For instance without pesticides we would be faced with losses of 50-80% of our crops. Without processing and the judicious use of chemicals we would have only fat and lean years without an assured food supply. Certainly there are few among us who would argue that freshly picked, rushed to the kitchen, eaten-immediately food is not the most nutritious food. However try a vine-ripened tomato grown in Toronto in January.

There are some losses in processing, however, modern technology is attempting to decrease losses while increasing quality. There is a trade-off involved. In order to achieve a year-round food availability we must accept a slight decrease in nutritional value. However, this decrease will not create a situation of malnutrition if a varied diet is eaten. The alternative is food in season only. This means periods of plenty along with periods of starvation. This has been documented in the Developing Countries many times.

The kinds and amounts of losses due to processing have been summarized by Barrat (1975). However, Barrat (1975) also provides an understanding of the improved nutritional characteristics in some foods which result from processing procedures. Indeed, processing does often destroy antinutritional factors in food, a fact which is most often overlooked or ignored. In this regard, Melnick (1975) provides an interesting summary of the role of processing to meet both the quality and nutritional needs of consumers.

There seems to be a propensity to-day for educators and the media to deal with what they think people "ought to eat" rather than what they "do eat". Frustration and anger often results when such well meaning individuals find their efforts wasted. This usually happens because such people assume that people eat for nutrition rather than the other factors discussed. One such case in point is breakfast. A survey conducted in 1969 by the Bureau of Nutrition Education in Massachusetts (Callahan, 1971) found that only 5% of the more than one million public school children surveyed ate a good breakfast. That is only one out of twenty children! Yet we hear cries of derision aimed at presweetened cereals. It is my belief that if children will eat presweetened cereal as part of a complete breakfast, then they will have a good breakfast. There really is not that much sugar on a presweetened cereal. No more in fact than what children would add if the coating wasn't there. The sugar issue itself is a side-issue controversy. Most of the allegations against sugar are unproven scientifically and the amount ingested to-day in North America does not pose any real health threat (Clydesdale, 1975). If children will accept and eat sugar coated cereals then they are an important contributor to good nutrition. Unfortunately the organic-natural cereals which are being produced do not serve the same purpose. They are high in calories, low in vitamins and exist due to the misinformation that the consumer has received. Interestingly, the stability of Vitamin A (which was shown to be inadequate or less than adequate in the diet of many Canadians in the Nutrition Canada Report) is excellent in "U.S." presweetened cereals. The added sugars apparently coat the Vitamin A and act as an oxygen barrier (Borenstein, 1975). This is another case where technology has benefits which are unknown or ignored.

Convenience and Cost

Consumer's to-day are insisting on being able to buy "instant", "heat and serve", and "ready to cook" convenience foods that grandmother never dreamed of. One of the reasons is the struggle for individual rights and the consequent fact that more women are taking jobs — 74 million of them to-day, and a projected 135 million in 2000 A.D. (Benarde, 1975). As a result they are willing to pay for convenience built into the food rather than domestic help. This kind of convenience allows a household to eat a varied, nutritional, high-quality diet. A result of technology.

Certainly convenience, as well as some of the other attributes of technology increase price. However, in many cases, technology saves a tremendous amount of money. For those who wish to go back to nature and sell natural bread rather than additive bread, I would recommend an examination of Table 4 (Melnick, 1975). Without preservatives, leavening agents, yeast foods and dough conditioners, there would be no white pan-bread industry as we know it to-day. These additives amount to 70 million pounds, valued at 15 million dollars and are used to produce 24.5 billion loaves valued at 6 billion dollars at retail. Without these additives, bread would require slower materials handling (longer proofing times) and daily distribution through thousands of outlets and daily wipeout of unsold inventories of still nutritious bread. The total effect would be an additional cost to American consumers of 1.1 billion dollars per year. A lesser figure would hold in Canada due to population differences, but nonetheless an

TABLE 4

Impact of Removing Additives on the Cost of White Bread*

COST FACTOR	*COST IN $/100 POUNDS* *ADDITIVE BREAD*	*NATURAL BREAD*
INGREDIENTS	5.40	5.17
MANUFACTURING COSTS	4.75	6.00
SELLING AND DISTRIBUTION EXPENSE	7.33	10.50
GROCER'S MARGIN	4.75	4.75
BAKER'S MARGIN	1.72	1.72
RETAIL PRICE	23.95	28.14
DIFFERENCE		+4.19
ADDITIONAL COST PER LOAF TO CONSUMER		+4 to 5 CENTS
ADDITIONAL COST TO CONSUMERS NATION-WIDE		+1.1 BILLION

*From Melnick, 1975

impressive expense. There are other examples of cost savings due to technology and such saving can place nutritious food into the hands of more consumers.

Safety

Food safety is an emotion packed problem and one that is creating a great deal of confusion in the mind of the consumer, particularly with regard to food additives. Hall (1973) stated that the attitude of concern is extraordinary in that the real dangers the consumers must face, and the only ones that have caused harm, are those which arise from food contamination or spoilage, or from poor food choices. Most of these dangers arise in the consumer's own kitchen. However, instead of attacking the housewife and the food she puts on the table, the activists have centered their attention on the substances that have been added to our food in order that we may get enough of it, that it may be tasty, appealing and nutritious, and so that the growing population in a complex society can be adequately fed.

Another point Hall (1973) makes is that it is probably wrong to speak of any food as being "safe". In the first place "safe" is really a negative term. It means the absence of any possibility of harm. Secondly, "safe" is such an absolute term that it excludes comparison or partition. Hence, it is as incorrect to say that a food can be "a little bit safe" or "relatively safe" as it is to speak of a person being "a little bit pregnant" or "relatively syphilitic." In fact, there is no such thing as an unqualifiedly safe drug or safe food. Even spinach will harm you if you eat too much of it. Semantics aside, it seems that in talking about the food we eat and the substances which, of necessity must be added to our food, it would make for far greater understanding of the role of food additives if we were to speak of their degree of harmlessness. This is more nearly accurate and it is less apt to be misunderstood by your readers and the public because harm, like risk, is a matter of degree.

There is another preliminary matter worth looking at before talking about specific food additives. It is that harmlessness is but one aspect of all of the points to be considered in talking about the quality of food. Food quality is measured not only by what food is not supposed to do, but what it is supposed to do, which is another way of saying that food, whether harmless or not, has little virtue if it is not nutritional, satisfying and acceptable.

The hazards to our food have been defined by Dr. Virgil Wodicka, former director, Bureau of Foods in the U.S. F.D.A. These hazards are widely agreed upon (Hall, 1973; Schmidt, 1975) and may be defined as follows with the most important hazard listed first and the least listed last:

(1) Microbiological Hazards: We can't really know just how prevalent are the hazards from food contaminated by bacteria and other organisms. The reason for this is that the illnesses resulting from such food contamination are not always evaluated by the victims or reported by physicians. Nevertheless, informed estimates indicate that perhaps as many as twenty million Americans suffer from the effects of bacteria-contaminated food each year. This is about one out of every ten people. All things considered, it does not seem to be a very great number except when one reflects on the fact that occasionally such illnesses are fatal, and that only the common cold causes more loss of time. The contamination is almost entirely due to unsanitary handling practices in restaurants, catering establishments and, alas, in the home. In thinking of the latter, it used to be that outbreaks of stomach upsets or worse occurred so frequently at church picnics, that "church picnic" nearly entered the medical lexicon as a descriptive term.

(2) Environmental Hazards: The known hazards in this area are small. However they may or may not come from industry and they may or may not increase depending upon regulatory actions and new methods of toxicological investigation.

(3) Malnutrition: This may become a much more serious problem in the future depending upon the population-energy-food interaction. Currently, however, it is poorly measured and poorly understood.

(4) Natural Hazards: Almost every food contains one or more varieties of toxic substances. In this case it is not what man put into food but what nature put there. Indeed we probably know more about food additives and their toxicological implications than we know about natural toxicants in foods.

(5) Pesticide Residues: Pesticides, although, closely associated with environmental pollutants, justify separate treatment as a food hazard. This has been an emotionally charged subject but as a World Health Organization expert committee reported "better education is the answer to hysteria caused in recent years by the supposed effects of pesticides. People need to be introduced to the basic principles of

toxicology in order to dispel the excessive concern over hypothetical but unproven effects of pesticides and to ensure a more realistic appreciation of hazards." Nonetheless, recycling, appropriate disposal and rational vigilance should be conducted in order to decrease the risks of serious hazards from such materials.

(6) Food Additives: Food additives, which are ranked last in priority, are often not even defined correctly, never mind examined rationally. Briefly a food additive is "a minor ingredient added to a food to achieve a specific technical effect." In order to avoid food additives, the purest would have to be content entirely with foods in season, grown locally and eaten only when they're fresh. This sounds great if you're in the right climate but isn't if you're not. As well, additives means, no condiments, no salt, no pepper, no sugar. Rather a monotonous outlook.

Hall (1973) provides some interesting facts about additive consumption. The most widely used additive in North America is a natural product, produced in abundance, and is a single chemical of high purity. It is sucrose, ordinary cane or beet sugar. The second most widely used additive is table salt, about 15 pounds per year. After salt comes corn syrup, about 8 pounds a year, then dextrose at 4 pounds. Following these, in descending order, are about 33 different additives which together account for about 9 pounds a year. Eighteen of these 33 are used either as leavening agents or to adjust the acidity of food. Of these, yeast, sodium bicarbonate, citric acid, black pepper, mustard and monosodium glutamate are the most often used.

There is approximately one pound of additives that we eat per year left. This one pound is divided among 1800 additives. Not really very much.

The counter argument here of course is that "what really matters is how dangerous the additives are, not just the amount we eat." In a sense this is a valid point. However, the danger from any material ingested is a function of both toxicity and the amount eaten. Therefore it is many times a fruitless exercise to feed animals huge quantities of a material that a human could never ingest in order to prove toxicological effects. Another consideration is that if the metabolic mechanisms of the test animal are overloaded the biotransformation of the chemical may be quite different from that seen at realistic dietary levels. A chemical may be fully detoxified at reasonable levels but incompletely so at high levels (Coon, 1973).

Hyperkinesis

It would be impossible to discuss food additives at this point in time without some reference to the report issued by Feingold (1973) on the supposed relationship between Food Additives and hyperactivity in children.

Hyperactivity is a rather ill defined behavioral state which exists with some children. As such it is an emotional and serious problem which is of the utmost concern. However, the Feingold report suffers from some serious scientific shortcomings and does not resolve the question either way. It did not define hyperkinesis and learning difficulty nor the criteria for selecting the patients enrolled in the study. There was an absence of a control group. In the report Dr. Feingold lumped hyperkinesis and learning difficulty into a single entity without any real basis. Direct comments by Dr. Feingold such as, "Except for terminology, there is no difference between artificial colors, flavors, and many drugs. They are all low molecular weight chemicals," must be questioned. This statement disregards much of modern biochemistry which has revealed the relationships between the detailed chemical structure of substances and their physiological effects as nutrients, drugs or inert or hazardous substances. It must be stressed that the human body functions to a large degree by means of such low molecular weight chemicals.

In a major response to Feingold's report, a committee of experts selected by offices of thirteen scientific and medical organizations has urged that controlled clinical tests be carried out to confirm or disprove the hypothesis. Further, this group, the National Advisory Committee on Hyperkinesis and Good Food Additives, has submitted a special report to the Nutrition Foundation (1975) which states that, on the basis of present scientific knowledge, and preliminary pilot studies, any indictment of food additives or of specific foodstuffs as a cause of hyperactivity is premature.

More recently Connors *et al* (1975) reported on a further study, which has been critiqued by the staff at the National Institute of Education (NIE, 1975) where the study was initiated. In both reports it was concluded that "findings should be reviewed with caution," and "that the experimental design is subject to certain problems". Again we are faced with a static situation.

Two months ago Harley *et al* (1976) from the University of Wisconsin presented findings that indicated that the least impartial observers of the children under study observed no differences between the behaviour of children on the different diets (with and without additives). The most involved observers, the mothers, noticed a difference only when the diet was changed as follows: baseline, control, then Feingold diet. No differences were observed by the mothers when the sequence was changed to baseline, Feingold, control diet.

The conclusions are again nebulous. The question now is whether or not to spend a great deal more money to investigate the initial hypothesis further. I do not have the answer to that question. You be the judge after reviewing the work in detail.

Fortification

Fortification of food with nutrients is probably the area which would be singled out by most as having had the greatest impact upon the health of the consumer. It is hoped that this manuscript has pointed out many of other advantages that technology has provided for the nutritional benefit of the consumer.

The concept of fortifying food and/or water with nutritional chemicals may be said to have its beginning in 1833 in South America when the French chemist Boussingault recommended the addition of iodine to table salt to prevent goiter. This practice has been adopted widely in Europe and North America with tremendous success since that time. The history of fortification is impressive. Margarine fortification with Vitamin A; Vitamin D fortification in milk; the enrichment of bakery produced white bread and family-used white flour by the addition of thiamine, riboflavin, niacin and iron. The enrichment of degerminated corn meal, corn grits, whole grain corn meal, rice, pasta products and of course fortification of cereals. Ascorbic acid fortification of many, but not all, fruit beverages and non-citrus juices is proceeding. More recently addition of Vitamins A and D to fluid skim milk, fluid low-fat milk and non-fat dry milk has been initiated.

There can be no question as to the beneficial effects of this technology. Most gross deficiency diseases have been wiped out. We don't even think or hear about them in North America. Scurvy, rickets, beriberi, pellagra — who suffers from these to-day in North America. As recently as 1955 a Canadian textbook written by Hiltz (1955) stated "In many parts of Canada one child in every nine shows evidence of having had rickets. This is true notwithstanding the fact that prevention and cure are so simple. There is insufficient sunshine in Canada to prevent rickets in children so it should be standard practice to give them daily some form of liver oil or concentrate." I remember with fond distaste the cod liver oil pills I received, how much more safer and desirable to receive this in a staple food product.

Canada, has taken the lead in one area, since it wisely carries out flour enrichment at the mill.

Even though most gross deficiency diseases have been eliminated, there are still problems. These problems must be faced with scientific inquiry and rational decisions. However, in light of the wild accusations and emotionality that surrounds some of these areas, this becomes a difficult endeavor.

Bauman (1975) has pointed out that "current and developing factors, however, are making it difficult to extend, or even maintain, successful enrichment and fortification programs. For one thing, most remaining nutrition problems are less well defined than vitamin or mineral deficiencies; and therefore, desirable food characteristics are less-easily determined, and the effects of dietary intervention are measured with limited confidence. A second factor relates to the increasing diversity and the rapidly changing patterns of dietary habits. The third factor is the increasingly complex variety of food products and eating environments available to the consumer."

However, these factors must be overcome and fortification implemented where necessary. Certainly, Nutrition Canada, the National Survey Report presented before the House of Commons on November 6, 1973 has pointed this out.

The consumer must be educated to eat better but they also must be educated to eat without fear. Also it is imperative that industry, health professionals and the media remember two very pertinent points as summarized by Clausi (1973):

(1) A nutritionally-modified food should have a balance in its important nutrients at least equal to the foods it may replace in the diet, and

(2) Nutrition must be put into the foods people eat — not just those the experts feel they ought to eat.

In addition to these critical consumer related points regulatory and technological problems face the manufacturer, among these are:

(a) Sources of knowledge on macro- and micronutrients and trace substances in food.

(b) Problems of taste, product performance, and processing brought on by the use of certain nutrients.

(c) Problem of storage life on nutritionally modified products.

(d) Problem of continued biological availability of added nutrients.

Natural versus synthetic: There have been and still are constant questions concerning the bioavailability of natural versus synthetic forms of vitamins. This of course questions the validity of fortifying food. Certainly bioavailability testing must be done as pointed out previously but in the cases where this has been done, evidence suggests that there isn't any difference between adding a certain chemical or having that chemical present naturally. In fact Pelletier and Keith (1974) found in a recent study that "the bioavailability of ascorbic acid in human subjects provided by synthetic L – ascorbic acid is slightly superior to that of the natural vitamin provided by orange juice. A slightly higher urinary excretion of the vitamin after orange juice explains in part the lowering of the serum levels. A selected bioflavanoid, rutin, failed to promote better utilization of synthetic ascorbic acid." These results are rather ironic in light of some of the recent controversy.

Consumption Patterns

Technology can provide food, however, in and of itself it cannot make a choice for the consumer to eat that food. Therefore it may be pertinent to look at consumption patterns in North America in order to see how consumers might better utilize their choice of available food.

Shute and Yankowsky (1973) have summarized trends in Canadian food consumption for the period 1949-1971. These trends indicate, in part, that Canadians are undergoing the following patterns in food consumption:

(1) Cereal product consumption has dropped consistently from an average consumption during the period 1949-51 of slightly over 170 pounds to an average consumption during 1969-71 of about 150 pounds.

(2) Sugars and syrups have shown little change in consumption since 1949, ranging close to 112 pounds per capita for the entire period studied.

(3) Fruits and vegetables, together, comprised about 26 percent (by weight) of the total food basket in 1971, as compared to 20 percent in 1949.

(4) Potato consumption remained relatively stable with a slight downward trend.

(5) Total consumption of fats and oils remained relatively stable, at 50 pounds per capita, during the period studied. Decrease in butter consumption was offset by an increase in vegetable oil consumption.

(6) Per capita consumption of meat and meat products remained rela-

tively stable until about 1962, averaging about 117 pounds. Since 1963 increased consumption of beef has resulted in this total figure rising almost consistently.

At this point I would like to use some academic license. The trends indicated above seem to parallel what has happened in the United States. Since food consumption patterns are not that different I believe this assumption to be valid, certainly within limits. Therefore I would like to present some data obtained from U.S.D.A. disappearance figures, 1973, to illustrate the effect of such dietary trends.

Table 1, shows nutrient disappearance, expressed as calories, for carbohydrates, fat, and protein. It should be noted that the major change is in less carbohydrate consumption and increased total fat consumption.

TABLE 1
LONG-TERM TRENDS IN NUTRIENT DISAPPEARANCE

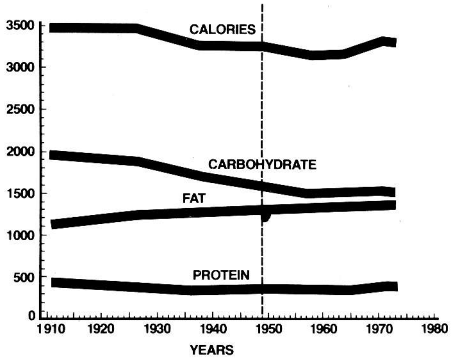


Table 2. Shows a further breakdown of food energy. Note that from 1911 to 1973 in the U.S., protein consumption remained constant at 12% of total calories, fat increased from 32% to 42%, carbohydrate decreased from 65% to 46%. Now, in Table 3 we can see the major reason for these changes. It is not, as some would have us believe, due to the consumption of processed food. It is, however, due to the fact that in 1911 we obtained 50% of our protein from plant sources and 50% from animal sources. Today (1973) we obtain 32% of our protein from plant sources and 68% from animal sources. This change in protein source has caused the concomitant change in carbohydrate and fat.

The answer it seems is obvious. For economic reasons, for world food problems and for health, we would be better advised to eat more fruits, vegetables, grains, including cereals and other carbohydrates than the amount we eat now. This is a necessary change and one that must be faced in the future.

Conclusion

Technology, used in a rational, moderate, sense combined with social awareness has much to offer. This offering along with education can provide a better, healthier life for a larger majority of the people sharing this planet. As Sir Francis Bacon once stated "Science was not intended to make imperfect man perfect, but to make imperfect man comfortable".

TABLE 2

BREAKDOWN OF FOOD ENERGY

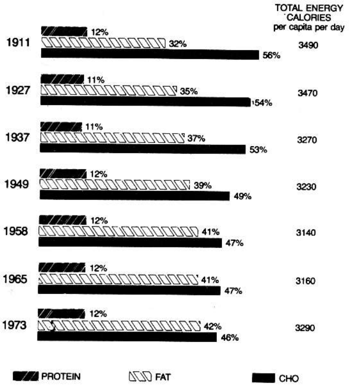
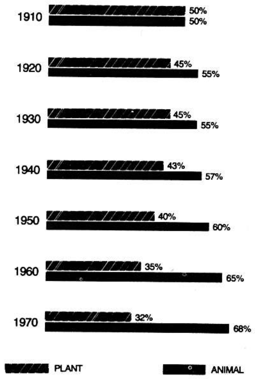


TABLE 3

SOURCE OF PROTEIN



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Abstracts of Current Literature

Submitted by The University of Windsor
Department of Home Economics

The Food Co-op Potential
Donald R. Marion and Bisrat Aklilu
Summer, 1975
The Journal of Consumer Affairs 9:1

The Food co-op is a partial answer to high and rising prices prompted by a concern over the inadequacy of the food distribution system serving low-income consumers. A study was conducted to examine low-income consumer food cooperatives and to identify those factors associated with their success or failure. Only their economic function was considered.

Since there were so few, two were chosen for the study—one successful (referred to as Alpha) and one unsuccessful (referred to as Zeta). There were several reasons for the success of Alpha, established in 1956, as compared to the failure of Zeta, established in 1968.

In the Alpha neighbourhood, residents were sold on the cooperative idea as a result of positive cooperative housing experiences and Alpha was assured a nucleus of business from the beginning. In its first year, Alpha sold 1000 shares at $25.00 per share thus raising $25,000 and received outside financial aid.

Zeta was organized in a community where cooperatives and basic principles of cooperation were essentially unknown. Shares were sold at $5.00 raising $6,500. An additional $100,000 was obtained in loans. But with this money, an existing supermarket was purchased for $70,000: $23,000 was spent on remodeling and less than $15,000 remained for operating costs.

The Alpha Board of Directors was composed of nine members, many with prior business and cooperative experience. The Zeta Board had 21 members: only one had business experience and none had cooperative experience.

There were also differences in the management of the cooperatives. Alpha had only one manager from the beginning. A business school graduate, he had experience with cooperatives before accepting management of Alpha. Zeta hired a manager from the community not fully qualified either in terms of business or cooperative experience. In less than a year members were complaining that the manager was incompetent.

The implication of this study reveals that food co-ops must be as efficiently run as other stores: low-income areas are particularly difficult for co-op food stores because people must be found to operate them; and finally low-income area co-operatives must deal with the problems of competitive pressure and management complexities in an environment generally hostile toward any type of business. Co-op areas must be chosen carefully. The study portrays a picture of limited growth potential for cooperative food stores in low-income areas.

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PAM adds no fat, grease, calories or sodium – it doesn't spatter or smoke – needs no refrigeration – and rinses right off. This pure vegetable coating on pots and pans means food won't stick – servings are attractive – cleanups much easier. Once you discover how helpful PAM can be, you won't want to cook without it.

If you missed your free can of PAM, there is a coupon offer in previous issues of the Canadian Home Economics Journal. For more information of professional interest, please write: Home Economists, Boyle-Midway Canada Ltd., 2 Wickman Road, Toronto, Ontario M8Z 5M5.

Developing resources for family potential: a family action model.
R. E. Cromwell and V. L. Thomas
1976
The Family Coordinator 25:13

The positive feedback from participants and resource persons plus frequent requests for additional programmes of this type warrant continued efforts to develop and explore new models of education for families. The programme reportedly has made a significant contribution toward developing an integrated and coordinated support system for families in one urban community. This beginning development has taken the form of increased contact, cooperation and collaboration among area professionals and has resulted in increased emphasis in preventive education for total family groups.

It is hoped that families participating in continuing education programmes can benefit from learning about the various strengths and limitations of this model.

The challenge of and need for preventive models of family life education have never been more in demand. The dual method of providing in-service training to professionals and providing preventive educational programmes for families is viewed as a major challenge for family life educators. The family group is an important audience for programming and is in need of educational information.

Families have yet to realize their ability to develop individual and group potentials. New techniques need to be developed to work with family groups to promote, what might be referred to us, "family awareness" and "family actualization".

It is suggested that family life educators work to create a reward system or social expectation that encourages families to consciously work toward strengthening their potential. One goal of such a procedure would be to replace the individualized "achievement motive" with family achievement of potential as a central component of the American ethos.

Discrimination in housing design
G. Allen
1975
Architectural Record, 3:141

Architects use of the design technique of discrimination (analyzing and dissecting problems into discrete individual components) has created definite problems with regards to contemporary low density housing design.

By discriminating between "habitable" and "non-habitable" spaces they have produced two distinct components of the housing unit; the private area and the public area. As a result of this segregation, all those elements associated with non-habitable or public space take on the more problematic issues, such as traffic flow, parking facilities, garbage collection, etc. What further develops from this discrimination is a division between the more negative attributes of the units and the positive, in other words a good side and a bad side emerges.

One indication or measure of whether this division has occurred in a particular housing development is a sign of care. If people sense there is nothing in their general residential environment worth caring about, their concern for outwardly appearance deteriorates. Also this could eventually lead to significant social changes in the surrounding area.

A possible solution to this problem is the avoidance of compulsive consistency no matter how appealing it is to the designer. Efforts should be made to form residential environments "not so much around a diagrammatic, conceptual consistency as around the consistent sensibilities of the inhabitants." The architect should adapt his designs to the qualities of the neighbouring buildings, being careful not to destroy the qualities of the natural site. Also his housing designs should be organized around community spaces in an active attempt to enliven those spaces while simultaneously creating the all important private area adjacent to them.

Ontario Government releases analysis of the textile industry.
B. Webb
1976
Men's Wear of Canada, Vol. 67, No. 1 : 26

An 80-page study on the textile and apparel industries in the province of Ontario was released by the Ministry of Industry and Tourism late in December, 1975. The main purpose of the study was to identify the needs of both the textile industry and the apparel industry, and present suggestions by them to achieve their objectives. The long-term goal of the study is to provide a base for the establishment of an industrial strategy for the province.

Some of the main suggestions from industry are as follows:

1. Import restraints for the purpose of removing the disruption caused by uncontrolled imports of apparel, sold below their foreign cost.
2. Programmes to enhance productivity (PEP).
    a. The continuation of the present system of financial support by the province.
    b. Training assistance should continue to be provided through present programmes being offered by community colleges.
3. Technology development.
    a. The use of computers in the apparel industry.
    b. Productivity centers could be developed in conjunction with, or out of the Ontario research foundation—to make available facilities in which the industry could develop and prove out new techniques.
4. Marketing—to encourage foreign and domestic sales plus the development of a strong Canadian identity by supporting the work of young Canadian designers.
5. Co-operative efforts by a constant liaison between the industry and

the Department of Industry, Trade and Commerce to remain up to date on tariffs, trade and technology.

A quality transfusion can put new bloom in the doubleknit market
B. L. Hathorne
1975
Textile World, 125:84-88

The article presents a point of view on the decline of the doubleknit market. Factors that affect the quality of the doubleknit fabric are discussed. These include the changing of the stitch design from simple single loops and close-knit interlocke which assure stability to long floats and fancy stitches which promote easy picking during wear. The average drop in fabric weight has been almost 50% resulting in fabrics that do not retain their shape after heatsetting. Final heatsetting speeds have been increased and temperatures dropped which produces an increased fabric area for the manufacturer and less stable fabrics in finished garments.

The author analyzes these changes to be a sacrifice of future business in order to produce immediate profits. Suggestions for returning quality to the doubleknit industry include changing the formula of fabric and garment development and combining these with control and good merchandising.

A parallel is drawn with the mistakes that occurred in the manufacturing of the "artificial silk" in the 1930's. Originally, these were good fabrics when manufactured and sold. Cheating began, producing an inferior product, and the market was gone. Fortunately, the industry took positive action and volume increased steadily.

The problem of the 30's is essentially the same as the problem appearing in the mid 70's. The quality is going uncontrolled and can reach unacceptable levels. An appeal is made to the industry to re-develop, re-manufacture, re-merchandise, and re-sell the fabrics high in quality, style, and durability that everyone knows can be made.

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by Kay Spicer

Canada's National Culinary Team Named for World Culinary Olympics

The elite of Canada's professional chefs have been selected to form Canada's national five-man culinary team to compete in the 14th World Culinary Olympics to be held in Frankfurt am Main, West Germany, October 21st to 28th, 1976. The five come from Yellow Point on Vancouver Island, Calgary, Windsor, Toronto and Val David, Quebec. The announcement was made by Hans J. Bueschkens, chairman of the board, Canadian Federation of Chefs de Cuisine. Three regional teams and a support team were also named, making Canada's official contingent twenty-six professional chefs.

Mr. Bueschkens, executive chef and director of services at the Windsor Raceway, Windsor, Ontario will head the delegation as the national team manager. He was team manager in 1972 when Canada placed fourth in the world competitions.

National team captain is Tony Roldan, executive chef, Harbour Castle Hotel, Toronto. Co-captain is Hubert Scheck, proprietor/chef, Inn of the Sea, Yellow Point, Vancouver Island.

Other national team members are Marcel Kretz, executive chef, Hotel la Sapiniere, Val David, Quebec and Robert Vercleyen, executive chef, CP Hotel Palliser, Calgary, Alberta.

Canada placed fourth in 1972 with such distinctive Canadian dishes as poached B. C. Salmon, Prince Rupert; Marinated Buffalo; Prairie Chicken with Wild Rice; Canada Lobster in Pernod and Roast Turkey with Chestnut Stuffing among over fifty entries.

Asked how Canada's chances are better for placing first, second or third in 1976, Mr. Bueschkens said, "better organization and the more efficient use of manpower and a concentration on "perfectionism" and quality rather than on innovation." He did not rule out the innovative aspect for Canadian entries, citing the possibility that the new "Beefalo" meat may be featured. Twenty-six countries have indicated their intention to participate in 1976.

Mr. Bueschkens attributes the teams' improved opportunities to win more gold awards to financial and promotional support being provided by the Catelli Food Company of Montreal through the publication and sale of its cookbook "World Culinary Olympics Medal-Winning Recipes" cookbook produced under the auspices of the Canadian Federation of Chefs de Cuisine. The emphasis is to be on strictly Canadian foods, representative of all regions of the country, employing techniques that are Canadian rather than the classic forms usually identified with European cuisine. The team members will be expected to "practice" their entries at least 14 or 15 times before departure time for Frankfurt.

Mr. Bueschkens is more concerned about the efforts chefs from France will put into the 1976 event. In 1972, the national team of chefs from France finished below their expectations. They will "try harder" in 1976. "A highly competitive French chef is a hard man to beat", he said.

The top three winners of the World Culinary Olympics are the national teams which win the most gold medals in the prescribed national events. The spirit and interest of these events is described as a "serious and governed competition, conducted under the strictest rules and rigidly policed." Each country's entries must be submitted in advance and those approved tend to avoid duplication. Judging is based on nutrition and the meal itself, preparation including cleanliness, how quickly and effeciently the team is able to prepare an entry, presentation (for which the most points are given) and the economics (cost) involved.

"Over a two day period our national team will be required to prepare and serve 400 meals — 100 each of 4 distinctly different menus. In addition, we have to enter 14 compulsory dishes to qualify as a national team. We plan to enter more, of course, and this will be the prerogative of our individual team members. And besides, we will have to prepare and display a Canada Day buffet for the Government of Canada which plays host to 500 chefs, correspondents and Olympic officials attending the competitions."

Consumers interested in supporting Canada's culinary teams may do so through the purchase of the cookbook, "World Culinary Olympics Medal-Winning Recipes", obtainable by mail from World Culinary Olympics Cookbook, 3333 Metropolitan Boulevard East, Montreal, P.Q. H1Z 2H8 for $3.95 plus a proof of purchase of "Olympic Effort" products: Catelli, Five Roses, Habitant and Laura Secord Puddings.

Bake A Batch — From Scratch!

Many people prefer to bake "from scratch", but like the convenience of a mix. Now Robin Hood Multifoods shows you how to prepare your own mixes in a new recipe booklet called "instant Baking."

Using instant blending flour, the booklet contains recipes for bread mixes, cookie mixes, pastry, white sauce and quick bread mixes. These can be prepared ahead of time and stored in airtight containers in a cool, dry place.

From these "make-your-own" basic mixes, the booklet outlines how to prepare four kinds of breads, a variety of cookies as well as muffins, coffee cakes and other baked goods.

Instant blending flour is a free-flowing flour that looks and pours like sugar and eliminates the dust and spillage associated with regular flour.

Robin Hood Multifoods has also released two other recipe booklets, one designed for Brodie's self-raising flour (contains baking powder and salt) and the other containing recipes especially for Velvet cake and pastry (soft wheat) flour.

Copies of "Instant Baking", "Brodie's Delightfully Good Recipes" and "The Velvet Touch" can be obtained for 25 cents for each booklet from the Robin Hood Kitchens, P.O. Box 8505, Montreal, P.Q.

Microwave Cooking Information

The Canadian Microwave Cooking Bureau has announced a major new program aimed at providing consumers with comprehensive information about microwave cooking.

Close to 100,000 Canadian households now use microwave ovens for meal preparation.

In 1976 an estimated 45,000 microwave ovens are expected to be purchased by Canadian consumers.

The Canadian Microwave Cooking Bureau has reorganized its operations in order to be completely self supporting. Previously the Bureau had been sponsored by leading manufacturers, distributors and retailers of microwave ovens and utensils.

The Bureau will continue to make available its 10 page "Microwave Cooking Information Guide", which answers questions about microwave cooking, "questions a consumer will need to answer to evaluate whether a microwave oven is indeed the right product for her family's lifestyle," according to Suzanne Martel, Information Director.

The "Microwave Cooking Information Guide" is available for $1.00 (cheque or money order payable to: Canadian Microwave Cooking Bureau, Box 54, Station S, Toronto, Ont. M5M 4L6).

U.S. Going Metric

The Metric Conversion Act of 1975 has been passed by both the Senate and House and was signed by President Ford on December 23. The act in effect recognizes and supports the United States voluntary switchover to the metric system, and establishes a metric conversion board to coordinate all such efforts. It contains no deadline by which the switchover must be accomplished.

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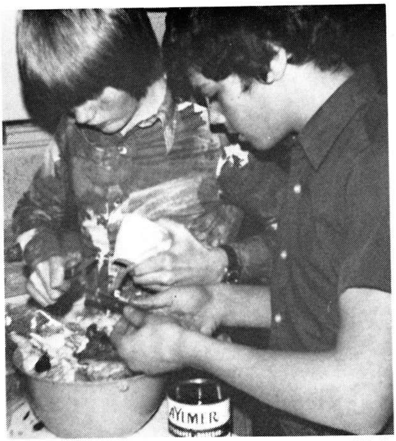
Canada Week June 25 – July 1

This special week is being sponsored by the Council for Canadian Unity, a non profit, non political affiliation organization. The honorary chairman is the Prime Minister of Canada and the Premiers of the Provinces and the Commissioners of the Yukon and Northwest Territories are honorary co-chairmen.

A goal for this special week is "to help Canadians realize the advantages and greatness of our country and to act constructively in order to promote Canadian unity".

"Salad Days"


A team from Cornwall Junior High School, Cornwall, P.E.I.

The Department of Home Economics University of Prince Edward Island received a research grant of $90,125.00 in April 1975 from the Department of Health and Welfare, Ottawa for a two-year study to determine whether a combined nutrition education and school lunch program could significantly change the dietary habits of Junior High School students. Six schools and almost 1,000 students are involved in the study.

Three different school populations are being studied. Group A have an integrated nutrition education and school lunch program. Group B have had only a nutrition education program while Group C is serving as the control group where neither a nutrition education nor a school lunch program has been initiated. The six-week experimental part of the study has just been completed. This year the data will be analyzed and a report prepared for publication.

One way of educating the students was via a Salad Making Contest — this picture shows the attention of the students involved.

Mary McGrath who was involved in this project submitted the following report on the contest.

Objectives — To introduce vegetables and vegetable combinations to grade 8.

— To encourage students to prepare and eat more vegetables daily.

— To illustrate that the study of food and nutrition can be fun.

Teams — Each grade 8 and 9 class were represented by a team of boys. The teachers were very surprised at the willingness of the boys to participate. In one class all the boys wanted to be involved so names were drawn from a hat.

Contest	— Teams met prior to the contest with the teachers in charge to discuss procedure. — Salads were judged and then taken back for sampling to each class. — The winning team from each school competed on C.B.C. T.V. (Charlottetown). — It was a fun and a learning experience for everyone (including many parents)!

Elizabeth L. Empey, Ph.D.

Dean Empey Steps Down

On March 5, 1976 the General Faculties Council of the University of Alberta approved the change of status of the School of Household Economics to the Faculty of Home Economics, with Director of 16 years, Dr. Elizabeth L. Empey, Ph.D. becoming Dean Empey, a well earned honor that Dr. Empey will be relinquishing when she steps down on June 30, 1976.

Dr. Empey talks of the "lows" and "highs" in her 16 year run.

"My sixteen years of administering the affairs of what is now the Faculty of Home Economics have been years of personal growth. Continuous growth is something that most of us desire and I therefore feel richly rewarded and satisfied as I end my sixteen year run. Like bodily growth which makes itself felt through physical jabs and irritations (adolescents know this, and so do adults when the growth is wound healing), mental and spiritual and emotional growth also register on the host as pain or elation — some degree of feeling which is unusual enough to register on the irritability scale, whether high or low.

Having been prodded to do so by a very bright and helpful person (one of the many such persons on our staff) I tried to search my memory for the lows and highs of my past sixteen years. I guess it didn't take too long to identify both extremes but I soon realized that the lowest lows are not for sharing; they still sound so depressing they are best left untouched for at least another decade or two. However, I do remember reaching a very, very low point a few years ago, when two of our staff members, perceiving my difficulty, quickly changed all their own carefully laid plans for the next few hours and swept me off immediately to the Faculty Club for a drink and a very good visit, a visit about things other than recent depressing concerns. I have forgotten what had upset me; it may have been one of those things still so depressing that it will not surface for fear of being shared and discouraging others, or it may be something which changed from monster to ordinary proportions quickly in the face of warm friendship so generously proffered. At any rate I remember the depth of feeling and the two fine friendships which resulted. Beyond that, I think I could say in more general terms that the most difficult times have come when I could see what our staff needed in the way of help or resources but was unable to find the way to obtain the help for them.

The high points which emerged quickly when I searched my memory were of two kinds. One is the fact that graduates of the past decade and a half are giving real leadership, sometimes by filling professional roles in new forms and new settings which none of us dreamed about when these persons were undergraduates at University. Thus, there are very real and substantial evidences that our hopes of ten or fifteen years ago were not just vain ones, that our endeavours do bear fruit, and that both the goals and the endeavours are well worth pursuing.

The other kind of high point is related to the staff of our Faculty, and I mean all the staff, non-academic and academic alike since we are all one team. We recognized long ago that the risk inherent in developing strength in the specialized sub-disciplines which make up our total discipline was the risk of divisiveness, creeping territorialism, disparity of views, uneveness in growth, internal confrontations, blurring of common goals and finally a consequent reduced ability to all tell the same story to persons outside our own group and thus a reduced effectiveness in describing our goals and our achievements. Yet we knew we must strengthen the specializations. So we knew also that we must assume the associated risks. The staff of our Faculty, having now built a team with a pretty sure stature, is showing an impressive courage and maturity in reversing any divisiveness and blurring of goals which had begun to appear, and I am thrilled with the strides they are making. This is probably the hardest of all the tasks they have faced so far and we must let them know they have the admiration, support and encouragement of their professional colleagues. Certainly they have mine. Indeed, they emerge as the high spot which I save for the last and highest point in these few remarks."

Dr. Empey was recently honoured by the Edmonton Home Economics Association for her contribution to Home Economics in the Province of Alberta.

MEMBERSHIP FEES

May we remind our members that the following membership fees are due May 1, 1976.

Active and Associate	$30.00
1976 Graduates from Canadian universities (for the year of graduation)	$15.00
Reserve (1)*	$15.00
Student (2)*	$ 5.00

(1) Reserve membership may be granted to those individuals who qualify as active or associate members and who are now (a) retired; (b) not presently employed.

(2) Student membership may be granted to: (a) a person enrolled in an undergraduate program at any Canadian university, faculty, college, school, or department which is eligible to send voting delegates to the A.C.H.E.S. convention; (b) a person who is an active member and pursuing *full time* study; (c) a person who is eligible for active membership and pursuing *full time* study.

You will need your receipt number to obtain the reduced fee for attending the 1976 C.H.E.A. Conference.

Doris R. Badir Becomes New Dean of the Faculty of Home Economics, University of Alberta

Doris R. Badir

It cost the new Dean a new pipe, but Doris Badir carried it home happily and presented the good news of her appointment and the lost wager to another important member of the household, husband Magdy, and their only daughter, Patricia.

Born in Canada in 1924, Dean Badir brings to Home Economics a wealth of knowledge and experience from the University of Manitoba, the University of Syracuse, the Universities of Michigan, Mount Allison, the London School of Economics and the Merrill-Palmer School.

After completing her Education, the first step in Mrs. Badir's career came in 1945 as a supervisor of Girls' Club program with the Manitoba Department of Agriculture. This was followed by appointments as lecturer at various institutions; Director of a Y.W.C.A. Camp; Assistant Professor and Dean of Women, University of Guelph; and as a Home Economist with F.A.O. in Cairo. She moved from Sessional Lecturer at the University of Alberta to Professor and currently, to Dean of the Faculty of Home Economics, University of Alberta. Her appointment becomes effective July 1, 1976.

Dean Badir is very interested in the community and belongs to many professional organizations and is now President-elect for C.H.E.A.

In 1970 Mrs. Badir was invited to be Keynote speaker at the 60th Anniversary proceedings at the Faculty of Home Economics, University of Manitoba.

Dean Badir has produced many publications, one of which is,

> "Student Personnel Services in Canadian Universities", *School Guidance Worker,* published in October, 1953 — with a follow-up study in December of 1960.

We wish Doris Badir every success in her new position.

Food and Nutrition

The Canadian Home Economics Association is one of eight professional associations in Canada which have joined together to sponsor the new Canadian Science Committee of Food and Nutrition. The urgent need for greater co-operation, co-ordination and planning in all matters related to food and nutritional health, resulted in this exciting organizational undertaking.

The primary role of the Committee is to facilitate the sharing of information and the co-ordination of intersociety food and nutrition activities and concerns. A second role is to provide information and advice on foods and nutrition. These eight societies working together provide a unique resource of expertise in a wide variety of technical fields directly related to human nutrition.

At its last meeting the committee elected Mrs. Sandra Matheson as the chairman. At this same meeting the committee finalized its "objective and goal" statement which follows. The two representatives from C.H.E.A. on this committee are: Louise Lambert-Lagacé, 4150 Trafalgar Road, Montreal, Quebec and Mary Butler Bush, 36 Riverbend Drive, Ottawa, K2H 5G8. If you have any comments or questions concerning the committee's objectives and goals, either C.H.E.A. representative would be most pleased to receive them.

Canadian Science Committee on Food and Nutrition

Objectives and Goals

To promote improved nutritional status of Canadians, the following professional societies have united to form the Canadian Science Committee on Food and Nutrition:

Agricultural Institute of Canada
Canadian Dietetic Association
Canadian Home Economics Association
Canadian Institute of Food Science and Technology
Canadian Medical Association
Canadian Pediatric Society
Canadian Public Health Association
Nutrition Society of Canada

Role of Committee

1. To encourage the sharing of information and the coordination of intersociety food and nutrition activities and concerns.
2. To provide information and advice on foods and nutrition.

Aim

To improve the nutritional well-being of Canadians.

Objectives

I. To increase interaction among member professional societies on food and nutrition.

   Goal 1 — To share information on current and projected food and nutrition activities.

   Goal 2 — To provide a forum for intersociety comment and review of respective society positions.

II. To examine food and nutrition issues.

   Goal 1 — To identify issues of mutual concern.

   Goal 2 — To review and make recommendations for action to appropriate bodies.

III. To encourage development, and implementation of a Canadian Food and Nutrition Policy.

Goal 1 — To determine current policy in food and nutrition.

Goal 2 — To substantiate the need for a Food and Nutrition Policy.

Goal 3 — To prepare guidelines for a Canadian Food and Nutrition Policy.

IV. To promote improvements in nutrition education.

Goal 1 — To identify existing nutrition education and information programs.

Goal 2 — To identify major constraints to improvement of nutrition education.

Goal 3 — To recommend appropriate action to alleviate constraints.

V. To promote the allocation of R & D resources to reflect nutrition policy.

Goal 1 — To assess current effort in food and nutrition R & D.

Goal 2 — To identify major problem areas.

Goal 3 — To recommend appropriate action.

Goal 4 — To promote interdisciplinary research and development in the field of food and nutrition.

CHANGING YOUR ADDRESS? YOUR NAME?

Deadline dates for changes:

February 28 for April Journal
April 30 for July Journal
August 31 for October Journal
November 30 for January Journal

Send mailing label from your most recent C.H.E. Journal with your new address/name to:

Canadian Home Economics Association
409A Burnside Building,
151 Slater St.,
Ottawa, Ontario K1P 5H3

MISS THELMA SEWELL
1927 – 1976

The death of Miss Thelma Sewell occured on February 16, 1976 in Fredericton, N.B.

Miss Sewell was a graduate of Mount Alison University with a major in nutrition and in 1967 she earned her master degree in education from Columbia University.

During her career she had taught home economics and had also worked with the Nutrition Services of the New Brunswick Department of Health. Later she was appointed Supervisor of Home Economics Education in New Brunswick and was responsible for introducing new concepts into the teaching of Home Economics. She was a curriculum consultant for several other educational departments including Quebec, Prince Edward Island and Newfoundland. She was one of the few educators in New Brunswick to be awarded a Fellow of the Canadian College of Teachers and the first in home economics (1968).

Miss Sewell was a member of many professional organizations including the C.H.E.A. Among her many other interests was harness racing.

The tributes to Miss Sewell were many and may be summed up in a tribute from a long time member of C.H.E.A. and retired home economics teacher in New Brunswick.

"She did so much for home economics . . . those of us who knew her personally and professionally are filled with a deep sadness at her passing. Her accomplishments were unique and her vision was ahead of her time. She helped all of us to become better teachers, and New Brunswick and all of Canada are better places becauses she has lived".

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Reviews

Ellen Swallow, The Woman Who Founded Ecology
Robert Clarke
Chicago, Fallett Publishing Company, 1973
276 pages, $9.50

This new biography of Ellen Richards is an exciting addition to the history of the Home Economics profession, we, who grew up with Caroline H. Hunts classic biography of Ellen H. Richards published in 1912, will get a brand-new picture of our heroine through the pen name of Robert Clarke.

Robert Clarke, cofounder of the International Institute of Euthenics, takes the modern approach to his subject and writes of Ellen by her maiden name, Ellen Swallow. Through his research and writing he adds to our knowledge of this remarkable woman, giving her credit for being the founder of ecology. In his book he tells how Ellen Swallow on November 30, 1892, suggested at a public meeting in Boston that the American people should become concerned about the newly named science, "Oekology", the "knowledge of right living".

Details of Ellen's life as given in this book throws light on her tremendous contribution as a sanitary engineer, a research chemist and an educational pioneer. She was not a feminist; when approached in 1893 to work on the Women's Board of the World's Columbian Exposition she refused, stating," . . . I prefer to give my time and energy to work in which men and women are in accord".

Mrs. Richards' work led her into the field of Home Economics and from 1897 to the end of her life Home Economics, "the Science of right living" took up most of her time and energy. Robert Clarke, in his book does not include many details of this part of Ellen's work. There is no need for him to tell about Mrs. Richards as a home economist for other sources have documented such details. Instead Clarke tells the exciting story of how Ellen Swallow pioneered in such fields as the status of women and human ecology. The story he tells makes exciting ammunition for the person who is trying to show how significant modern Home Economics subject matter is to the solving of present day social, economic and ecological problems.

Home Economists should be proud of the accomplishments of our founder. I recommend that each one of us should own a copy of this book and lend it to our colleagues and friends in other disciplines in order to help them understand what we mean when we quote Ellen Richards' famous statement: "Home Economics is the science of right living". We can go further than that in using this book because a better understanding of Ellen Swallow's life and work helps one to relate to the "right now" topics such as nutrition, pollution and ecology.

Reviewed by Edith Rowles Simpson, Dean Emeritus, University of Saskatchewan

The Pumpkin Book
Produced and Edited by Terry Pimsleur and Company, 2147 Union Street
San Francisco, California

Compiled by Mary Bettencourt, 60 pages 1975

Available for $3.50 plus 30¢ postage from: Pumpkin Book, P.O. Box 274,
Half Moon Bay, CA. U.S.A., 94019

The Pumpkin Book deals efficiently and completely with the subject of pumpkins. It includes a description of the various varieties and how they differ — hints on growing, storing, basic preparation and food value. This information is accompanied by a very complete set of tested pumpkin recipes.

The recipe section of the book is clearly organized into groups focusing on soups — both hot and cold, pumpkin as a main course, breads and pancakes, pies, cakes and cookies, desserts and pickles and marmalades.

The wide range of tempting recipes in the book is clearly designed to expand ideas about the pumpkin and to encourage readers to enjoy pumpkin year 'round.

Several of the recipes were tested and found to be interesting and practical uses of fresh and canned pumpkin. A special favourite was "Marie's Pumpking Nut Bread".

Food editors may be interested in the fact that photographs are available of several recipes.

This booklet would be of interest to anyone in the communication field as well as the inventive homemaker who wishes to use pumpking in more ways that merely a seasonal dessert.

Reviewed by Mary Lou Carter, Freelance Home Economist, Toronto

"How To Make Furniture Without Tools"
Clement Meadmore
Pantheon Books
Random House
New York

Dining Chairs, Sofas, Bar Stools, Desks, Tables, Beds, Book Shelves — in fact a whole houseful of furniture that you can make without any tools at all. All you need is plywood, which your friendly lumberyard has previously cut according to your directions, a tube of ordinary white glue and a roll of masking tape to hold the parts together until they are absolutely dry.

Overnight you can produce furniture which is inexpensive, attractive, and according to the author, comfortable and practically indestructible. The furniture has a sleek, almost austere look about it, reminiscent of the Parsons School of Design, where the author teaches sculpture.

For each piece of furniture there are specific directions for assembling along with plenty of diagrams, a tear-out order form containing cutting directions for the lumberyard and an additional order form for your own records. The book also contains general information on sanding, gluing and painting. The novice as well as the pro will pick up a few hints here. Chairs and stools have foam rubber pads added for comfort.

Although I haven't tried it, I'm sure that making this furniture is relatively simple. It is quite attractive in spite of the fact that it is made from unglamorous plywood. I do have a few doubts about the comfort of the absolutely curveless chairs. What puzzles me is — where do you find a friendly lumberyard to cut the plywood to your specifications? That could be the most difficult part of the entire construction process.

Reviewed by Jean M. Winfield, Home Economics Consultant, Glanworth, Ontario

Madame Benoit's Microwave Cook Book
Madame Benoit
McGraw-Hill Ryerson Limited
Scarborough, Ontario
September, 1975
300 pages, $10.95

It has been said that nutritious food is not nutritious unless it is consumed. A similar apothegm might be used to describe the microwave oven — a microwave oven is not useful unless it is used. Madame Benoit's new Microwave Cook Book should inspire any present or future owner of a microwave oven to use this time saving appliance to its full potential.

In an attempt to provide the reader with an understanding of this new concept of cooking, Madame Benoit devotes the introductory chapters to detailed but basic explanations of the microwave principle, oven operations and the utensils needed. Timing, both in thawing and cooking, is crucial when dishes cook in seconds, and simple instructive charts are given which cover all categories of food. A comprehensive collection of recipes are included as well as a section "Tips Well Worth Knowing" ie. softening butter, peeling peaches. There is even a chapter on "How to Dry Herbs and Flowers in the Microwave Oven". Colour illustrations are few but effective.

The book is suitable for teachers, home economists, laymen or anyone interested in the field of microwave cooking.

Reviewed by Jean Patterson, Senior Home Economist, Canada Packers Limited

Cheap Chic
by Caterine Milinaire and Carol Troy
Harmony Books
New York, 1975
$6.95, 223p. soft cover

"Personal style is what this book is all about. Fashion as a dictatorship of the elite is dead." This is a new book worth asking for (providing you can pronounce it) if you are young and/or involved with the young. It is a book that has caught the attention of a number of serious-minded reviewers and columnists, although it is not a serious book. It is a book that expresses many of the values of young people today, values different from, and some not so different from, those of their elders. It is a type of "How to" book, telling youth of both sexes how to express in their clothing some of their ideas about ecology, their bodies, thrift, travel, humour, nostalgia (good), as well as status, materialism, elegance (bad). Within its pages, we are introduced to a lot of people who are witty, original, refreshing, outrageous, and stimulating. The pictures alone are worth the price of the book — a fascinating collection of photos and drawings, most never seen before. While there is a strong New York atmosphere, the behavior described is common to youth everywhere today.

An overriding irony soon becomes apparent to the thoughtful reader: "the dictatorship of the elite" may be dead, but it has been succeeded by a new kind of dictatorship. It is good to wear denims, cheap T-shirts, war surplus gear, Thrift Shop clothes, painters' coveralls, etc., but along with these, the plain white shirt must be pure silk, the boots must be $150. treasures, the simple jewellery real gold. Indeed, an interesting "leather fetish" runs through the book — boots are the Cadillacs of the counter-culture. In effect, then, we have the old fashion hype in a new guise: express yourself, but these are the rules. Cheap is good, but only sometimes. So the symbols may be new but symbols remain: a rather comforting thought. Human nature is not as changeable as we are sometimes led to think. And while clothing is simpler, freer, more "honest" than in the past, clothing as a tool for communicating is more significant than ever.

Reviewed by Betty Ann Crosbie, University of Toronto

Cooking The Metric Way
An Easy Guide to Good Nutrition

Alpine Press Limited
Vancouver, B.C.
1975 — Prepared by the British Columbia Home Economics Association
Distributed in co-operation with Super-Valu Stores

"When we started planning this book, our most difficult task was not what to include, but what to leave out! " This is the opening statement in a new metric cookbook — and describes the book in a nutshell. This neat 13.5 x 20 cm book has a wealth of information in it, not only about metrics and how it affects our shopping and cooking habits, but also about good nutrition, purchasing, and even microwave cooking.

The metric section desribes the volume measures to be used in metric recipes. As well, it includes approximate conversion tables from the Imperial to the metric system for measures, baking pans, temperatures for deep-fat frying, candy-making, oven cooking and even internal meat temperatures. Approximately 50 pages of recipes gives a good cross-section of cooking with metric recipes, everything from meats and fish through breads and cereals to vegetables, desserts and sweet treats. Many of these recipes are basic enough to make this a valuable educational aid for secondary school Family Studies. There is an occasional slip — a Cheesey Meat Loaf is baked in a 2 quart casserole (should be expressed in litres); a Pumpkin Pie is baked in a 10" pie shell instead of a 1.2 *l* pie shell.

For those of you who received an early copy of this cookbook, there are two corrections. A correction for page 102 as follows:

QUANTITY SERVINGS OF GROUND COFFEE

For 25 average servings — 4.5 *l* water
For 50 average servings — 9 *l* water

A correction for page 98 should also be noted as follows: Utensils . . . Wendy Sanford of Corning Glass reports that CORELLE® Livingware cups with open handles *can* be used in microwave ovens.

Since this is one of the earliest metric cookbooks, the feeling was that it be done in terms of soft conversions, with hard conversion being applied at the time of a reprint. This will mean a lot of changes, as already the cookware and bakeware section is leaning towards volume measures, rather than a dimension measure. For example, recipes will call for a 1.3 *l* round layer cake pan rather than a 20 cm round layer cake pan. With hard conversion will come more logical volume sizes in cans (hopefully) or a pact among recipe-writers to include both metric volume measures *and* metric can sizes. Hopefully, in a reprint, the photograph of metric cooking equipment can be updated with consumer equipment rather than laboratory equipment.

Cooking hints, explanations, descriptions of cooking terms, and valuable basic information can be found throughout this book and the British Columbia Home Economics Association is to be congratulated for such a mammoth undertaking is such a short time.

To obtain a copy of this book, send $2.25, along with your name and address to Mrs. Marjorie Taylor, 2268 Kensington Ave., Burnaby, B.C. V5B 4E2.

Reviewed by Margaret Fraser, Freelance Home Economist, Toronto

BOOKLETS AND PAMPHLETS

Described — not reviewed

Money Management — Your Automobile Dollar

In 40 fact-filled pages, this booklet developed by home economists, explores automobile ownership and helps you determine how much money to allow for this expenses. Information on buying new and used cars, choosing models and options, and determining the right price is included. The pros and cons of using cash or consumer credit are considered. Simple charts give guidance in estimating the costs of owning and operating an automobile, comparing dealers quotes on the car's list price, options and other charges, and comparing insurance rates.

Additional chapters cover effective car maintenance, operation and repair, as well as ways to handle complaints. Special attention is paid to the subjects of energy, ecology and safety as related to the automobile.

To obtain a copy, send 35¢ and your name and address to the Money Management Institute, Household Finance Corporation of Canada, 85 Bloor Street, East, Toronto, Ontario M4W 1B4.

"A Look at the Dietary Standard for Canada"

Dispatch No. 39 — February 1976

DISPATCH is a fact sheet published approximately 8 times per year by Educational Services, Health Protection Branch, Health and Welfare Canada.

The most recent issues takes a look at the Dietary Standard and it also contains the reproduced table from the standard showing the recommended daily nutrient intakes as revised in 1975.

This issue gives a brief background on the first Canadian Dietary Standard published in 1950 and covers such areas as the use and misuse of Dietary Standards in general.

DISPATCH is a free publication for which there is a mailing list.

For a copy of DISPATCH No. 39 write:

Educational Services
Health Protection Branch
Health and Welfare Canada
Ottawa, Ontario K1A 1B7

Described — not reviewed

Selected Nutrition Teaching Aids

This is a publication recently released by the Health Protection Branch of Health and Welfare Canada. It is a revised version of the former SELECTED NUTRITION TEACHING AIDS FOR PUBLIC HEALTH NURSES and is an extremely useful resource for professionals, including home economists, dietitians and educators as well as members of the nursing profession.

The revised edition of this resource guide includes the following topics: Food Selection, Consumers and Weight Control, Food Facts and Fallacies, Expectant and Nursing Mothers, Mothers of Infants and Pre-schoolers, Teenagers, the Elderly, and Sources of Nutrition Information. Each section outlines the basic nutrition principles related to the topic and includes back-up information and a bibliography.

Copies of this publication are available in both FRENCH and ENGLISH by writing to your Health Protection Branch Regional Office in either Vancouver, Winnipeg, Toronto, Montreal and Halifax *or* by contacting the office of your Provincial Nutritionist.

Described — not reviewed

Dietary Standard for Canada — revised edition 1975

This is a publication which has recently been released by the Bureau of Nutritional Sciences, Health Protection Branch, Health and Welfare Canada.

The first Canadian Dietary Standard was prepared in 1950 and revised in 1964.

the current standard was completed in 1975 by the specially appointed Committee for the Revision of the Canadian Dietary Standard.

The new Standard contains recommended daily intakes for energy and for 27 nutrients, an increase of 12 over the number of nutrients included in the 1964 Standard.

A comprehensive table lists these recommended daily nutrient intakes with the justification for each specific figure in the table being discussed in detail.

In addition, this publication contains a useful References section which includes a number of specific references for each of the 27 nutrients contained in the Standard.

THE DIETARY STANDARD FOR CANADA – revised edition 1975, is an excellent resource for professionals including nutritionists, dietitians, home economists and educators.

It is available in both FRENCH and ENGLISH from any Canadian Government Bookstore or by writing:

Canadian Government Bookstore
Mail Order Section
171 Slater Street
Ottawa, Ontario K1A 0S9

Catalogue No. H58-26/1975

Price: Canada $3.75
Other Countries $4.50

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Metrics In The Kitchen

This comprehensive teaching program is designed to cover the four basic metric measures in the kitchen: length, volume, mass and temperature. In a five lesson format, students are taught metric kitchen vocabulary, the use of new metric tools and measurement skills. In addition, shopping, meal planning, food preparation, and serving information is discussed, aided by the inclusion of numerous kitchen tested metric recipes.

Each kit contains:

- a full color 60 frame film strip;
- a related, easy-to-use teachers' guide;
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- an oven temperature decal;
- an informative course related 46 cm x 100 cm wall chart.

The price of each kit is $35.00. Send your cheque or money order (please do not send cash in mail) to:

Metrics In The Kitchen
General Mills Canada, Ltd.
P.O. Box 8178
Toronto, Ontario
M5W 1S8

CANADIAN HOME ECONOMICS CONFERENCE
JULY 14-16, 1976
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The Exhibits Committee is pleased to advise the members of the Association that the following companies will be among those exhibiting and contributing at the conference to be held at the Four Seasons Hotel in Toronto.

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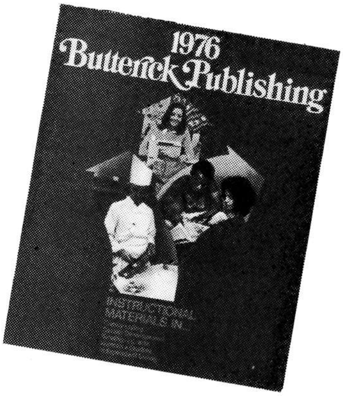

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